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FINAL TECHNICAL REPORT

## FOR NASA GRANT NAG-3-72

### Entitled

# NUMERICAL SIMULATION OF INTERNAL HEAT TRANSFER PHENOMENA OCCURRING DURING DE-ICING OF AIRCRAFT COMPONENTS

Prepared for

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by

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The numerical simulation of the internal heat transfer phenomena occurring during anti-icing or de-icing of a layered aircraft or rotor blade with an electrothermal heat source has been a subject of intense research by University of Toledo faculty and graduate students since 1980 and was completed in January, 1996. This was an intense effort and enabled University of Toledo faculty members to become experts in anti-icing and de-icing of aircraft components. All of the theses, international conference papers, and journal articles resulting from this work are available in the open literature and are listed in the attached pages. All of this material has previously been provided to the grant technical monitor.

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